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## Trucking in North Carolina.

On the fourth of March, we paid a visit to the noted North Carolina truck region around Newberne. Newberne is about 100 miles southeast of Raleigh, and is reached by way of the North Carolina railroad, now a part of the Richmond and Danville system, to Goldsborough, and thence by the Atlantic and North Carolina R. R., nicknamed in North Carolina the "Mullet Road," because of the great fish business transacted over it. It is a pleasant old town, occupying the point of land between the Neuse and Trent rivers, at the mouth of the latter stream. The Neuse is here navigable for large steamers, and the transportation facilities by water and rail are both good. The country about the city is a level sandy plain and evidently well adapted to the growth of early vegetables. The soil is a dark sandy loam, growing darker in color as we go from the water front back towards the swamps, where it becomes a jet black peat. At the time of our visit there had been quite a sharp frost, and the fields of peas and cabbage showed some effects of it, though not to any disastrous extent. The culture of these early crops is more extensive than I had supposed. Vast level fields, entirely filled with cabbage or peas, were to be seen on every hand mile after mile. Some of the fields of early cabbage I estimated to contain from 75 to 100 acres, while the acreage of peas seemed but slightly less. The pea crop is not so far advanced as it was when the great frost of last March played such havoc, and the prospect is that the crop will be very great this year. Some cabbages were already being cut, and a few weeks hence these great fields will have been swept clean. The acreage of Irish potatoes appears smaller than usual and much later, on account of the continuous rainfall which has delayed planting. Work is rapidly progressing for the later crops of snap beans, squashes and melons, and the large compost piles gave evidence of the liberal manuring practiced.

Though the weather at the time of our visit was still cool, the old town was gay with flowers. Great bushes of Gardenias (Cape Jessamines) were full of buds, and in their gigantic size put to shame the little plants we used to nurse in greenhouses in

Maryland. The Cape Jessamine blooms continuously here from April to December, and grows much larger than in the uplands about Raleigh. Camellias, though not so common as the Gardenias, were already in full bloom, and we saw one, apparently "Sarah Frost," covered with splendid flowers. The old double white Camellia is rather more tender than the colored varieties and is seldom seen outside. I was surprised not to find Azaleas more grown. The people hardly realize the capacity of their climate in the way of shrubbery, and seem content generally with the evergreen Euonymus, Gardenias and Forsythias and Spireas. In many yards were splendid beds of white Iris in bloom; Hyacinths were a little past their prime, but the Narcissus of several sorts were in gorgeous array of gold and white. In one sunny yard the Safrano rose had opened its buds, and tea roses everywhere were setting buds. All this when the papers announced five inches of snow in Baltimore and Richmond. Strawberries were showing a few blooms, but had evidently been nipped a little by the frost, and fears were expressed that the cold had hurt the peaches and plums which were in full bloom. Some injury has been done here about Raleigh, but we hope that most of our peaches are not open enough to be entirely killed. The fact that the frost was much less severe than last spring, and the blooms not so far advanced, gives us hope that they may escape. The rains still continue and we can hardly ascertain the true state of affairs until we have a few days of sunshine. W. F. MASSEY.

Raleigh, N. C.

## Cold Waves.

Four classes of men are directly interested in the knowledge of the approach of cold waves: farmers, shippers, sailors and insurance men. Between the signal service office and the newspapers, to those in cities, or on lines of railroad where the daily papers are received soon after their publication, this news is available, but not so to those at a distance in the country. Those who have studied the cold wave warnings know that usually they take two directions, either sweeping southeast from Montana over most of the United States, or moving more easterly and confin-

ing themselves to the tier of states south of the lakes and the St. Lawrence river. Now, while these things are known and appreciated, their causes are not so well known.

The origin and causes of rains may be found in every work on physics. But the method of their prediction is not usually given. The signal service office, with the view of rendering the predictions more accessible to the public, have published a volume, by Prof. Cleveland Abbe, so well-known to scientific circles, on "Storm and Weather Predictions," from which we extract the following passages bearing on the subject that may interest THE FARMER'S intelligent readers:

He divides the atmosphere into four layers, but the cold waves are concerned with only the first and third.

First, the lowest stratum, namely, from the upper surface of the ground or fog up to the lowest cloud surface: Throughout this region temperature is in the day time regulated by purely convective action due to interchange of air in the dry stage; but, in the night time, this stratum is to be divided into two portions; the lowest near the earth where the convection is entirely wanting and radiation controls the temperature; the upper one, constituting by far the greater portion of the stratum, in which convection still goes on but is less active than in the day time.

Third, the higher stratum, whose temperature depends on the equilibrium between the absorption and radiation that goes on between this stratum, on the one hand, and the clouds, fog, earth and air beneath, and the sun, moon and stars above.

Many persons suppose that the cold air that starts east of the Rocky Mountains and flows southeast over the United States and constitutes our cold waves, has its origin in this third stratum. Prof. Abbe is of the opinion that while it is possible they may, still there are greater reasons for believing they originate in the first, "where the dry air of the first stratum cooled by radiation toward the cold ground below it, and toward the clear sky above it, accumulates in deeper layers in the long winter nights of the Arctic regions, and flows toward any region where ascending buoyant warm air offers it enough opportunity. Its flow is due to a slight gradient of pressure in the direction of the flow and not

to a cyclonic flow around a low area. It is not likely that these cold waves can be due to the descent of cold air from above; all the circumstances point to the conclusion that they represent the horizontal flow of immense masses of dry air from the northern regions, and that their cooling has been originally due to terrestrial radiation unopposed by solar heat, aqueous vapor, or cloudy skies. They are comparatively shallow and broad masses of cold dry air, whose dryness is as important as their temperature."

From this it is fair to conclude that if for several consecutive days there has been a rise of temperature above the normal, either in the immediate section, or on its south side outside, then a cold wave may be expected. Thus, in Wisconsin the temperature at 2 P. M. was 81°, 52° and 50° respectively on the first, second and third instant, followed by a dropping to 27° on the morning of the fourth. The same occurred on the third, fourth and fifth of February, in 1889, when the thermometer was 49°, 47° and 54° respectively, followed by a fall on the sixth to 20°. The normal temperature of the month was 31° in '89, and 44° in '90. A long observation of some 20 years, at Princess Anne, prior to 1850, gives the average temperature of the month at 39°. And an examination of our own records, as well as those at Princess Anne, shows this rule to be a safe one. We can, by attention, preserve plants from the effects of cold waves, but not fruit trees. The importance of cold wave signals is generally acknowledged; we simply desire to add somewhat to their value where inaccessible. A.

## What's the Matter with the Farmer?

This question has been, and is still, being asked of every one, and by every one, from the President of the United States down, and why? Because it is getting to be the serious question of the nation. The very foundation of our national greatness is being undermined. It is no longer to be denied that if farming, the main stay of any nation, is going to ruin and decay, the nation, or people that allow it, must go down in the same ruin.

The effects of the depressed condition of farming has been felt to such an extent in every other pro-



fession and branches of trade that cool, solid, brainy men have turned sick at heart. The man with his millions no longer feels at rest when his mind turns to the deplorable condition of the average farmer; he, too, shares in the feeling of insecurity, no longer has that confidence he once had in his millions. Therefore, he, as well as the many others that have their money, property and the safety of the nation at heart, are trying to solve the question of "What is the matter with the farmer?" in hopes there may be found a remedy to save him and the nation.

I have been looking over the matter, reading carefully, and listening attentively to what has been brought out on this question, in hopes some one would strike the key note and bring forth the sound, even though it would be disagreeable to some ears; but nothing has been advanced that I have seen or heard to locate the seat of the disease—many charge it to the tariff—others to the insufficiency of money in circulation; others to trusts and combinations; others to the heavy taxes; others to gambling in produce—in fact, it is charged to every cause and every party but the right one. I have asked myself the question, why this close-mouthed action? Does any one fear to bring the diseased child home and lay it at the door of its parents, or are the masses outside of the farmers so blind they cannot see the cause and who is responsible for it?

Now, I say the farmer, and he alone, is responsible for all our ills; it is he alone that *downed* our own profession; that fills the pockets of the nation and the nation's trades, manufactures and professions, and makes himself and his family beggars, dragging them down to a level with the earth, that all may walk over him.

Here is your independent go-as-you-please farmer: "Who owns this farm?" "I do, sir." "Any mortgage on it?" "Yes, more than it will bring." "Do you pay up the interest?" "Sometimes I am behind two or three years." "Why don't they foreclose?" "It wouldn't bring more'n half the mortgage." "Who owns your stock, farm implements, house furniture, &c.?" "Mr. B. has a mortgage on them and my coming crop; he sends me some provisions, a little fertilizer and seeds; I send him my crop and he pays himself out of it." "Do you ever get any returns?" "Yes, he sends me statements showing me I am square; some times there is something to make up to him."

This man is one of your independent farmers, and there are thousands of them in this state. He has shown you he doesn't own the bed he lies in, the horse he rides, nor the cow that helps feed his family. Still, you can't starve him out; he will get enough in some way off the place he lives on—*don't call it a farm for Heaven's sake—to keep*

soul and body together, and you will see him around talking up the Republican, the Democratic or the Prohibition party. He has business at the store to attend to, but none at home. What are that plow, cultivator and harrow doing in the field since last summer? What's that gate doing pulled off the hinges and rotted out on the side of the road? What's that woman doing with that axe? Cutting wood to cook something for that independent go-as-you-please farmer that has lots of time to talk up his party and attend to the orders of the boss, but no time to look after the interests of his family; no time to think, to read, or try to work up some plan that will improve him and his family's condition. Unfortunately, the farmers are the only class on earth you cannot starve out. He will get enough off the place he is on to keep life in him, whilst other classes have first to get the money before they can get the feed. If there was any way to starve him to terms as others are, you could knock some of his bull-headed independence out of him and induce him to use his brain and energies to help himself and his class.

I ask the question, do the products of the farm bring any wealth to the nation and its people? Without the products of the farm the nation, the railroads, the manufactures and the merchants would be bankrupt in a short time. How are these interests now prospering? Fairly well, and would be doing far better if the farming class was doing only *one-half as well as they* (the other classes) are now doing. How is it with the farmer? His nose is to the grindstone with his heels in the air. He paid for the grindstone. He paid the men to swing his heels up in the air. He pays the men to run that stone at lightning speed for his especial use. He growls and kicks about it; but that is soon made all right, when one of the bosses comes along and tells him to go in for his party and do noble work for some outcast of a politician, and he will see that he has a chance for a certain office, said office having already been promised to fifty others. But why is it, if all other classes are being benefited or getting rich from farm products, that the farming interest is so depressed and farmers so poor? Because he is an independent farmer and can attend to his own business without the advice or assistance of his fellow farmer. He prefers to take a lone hand; the cards and odds are against him; the game is lost. Some say, give us a protective tariff on our products. No matter how much tariff was put on, you never would get enough of it to fill your pipe with tobacco. Some say, let us have a free and unlimited coinage of silver; others, start the steam press and run out millions of greenbacks, until we have a circulating medium of about \$60 per head. Say they did make it \$60 per capita, how are you going to get

your share, Mr. Farmer? You've got nothing to get it with. But if some one gave it to you, how long would it be before some moneyed king would add it to his pile?

Some say let the United States Government divide up the surplus in the Treasury, loan it to the states at low rates of interest, and the states loan it to the farmers on their farms.

If you don't think the farmer is degraded enough now, *apply this to him and he'll get there*; but I hope I'll never live to see God's noblest work brought to such disgrace. I care nothing for the tariff on our products. If the government wants to do anything to stimulate and build up farming, let them pay prize money on every bushel of surplus stuff sold from the farm until there will have been paid into each farming district \$60 per capita of its inhabitants, and then stop. This would be nothing more than what the government is doing for the manufacturers, only the people pay the tariff, or prize money, and not the government.

If I had the say I would give the farmer nothing. He should have no charity—no class legislation. He has the power; he has the ways and means to make himself fat and happy and a blessing to the nation, if he would. He is too contrary and headstrong to work in his own interest, but you will ever find him diligent in working against his brother farmer—which is against himself. Why does the farmer pay 80 per cent. of the tax on the last pig he has and allow the man of millions to pay on a few thousand? Because he so chooses; he can stop if he will. Why does the farmer allow useless offices to exist that are costing thousand of dollars without any benefit? Because he so chooses. Why does the farmer allow a man in office, with less brain than he has, to be paid more for five hours work than he, the farmer, gets for a week, working night and day? Because he so chooses. Why will a farmer sell his products for one-half, and often less, than they are worth, and be cheated in weight and measurement, beside? Because he chooses to; it's his business, *not ours*. Why will a farmer pay one-third or more for his farm and family supplies, when he knows he can just as easily save it, and show he's got some brain? Because he chooses to do it; it's his business, *not ours*. Why is it that the farmers will allow such laws as we have in this state, that are grinding on the farmers and all industrial classes, to remain where they are, when they should have been erased fifty years since? Because he chooses to do it; we don't want anybody to say anything against our party; *we do all things well, our party does!*

In answering the question, "What's the matter with the farmer?" I say the whole trouble lies in his being a willful, bull-headed, stubborn, contrary human as ever God let live; he

has the brain; he has the perseverance, the muscle and *the wherewith* to make enough to pay off all he owes and be prosperous and happy.

He has the power to correct all evils of the land if he would but unite and use his power as other classes are doing. There can be enough saved on the purchase of supplies and sales of produce in ten years to clear every farmer of debt in the country. Why don't they do it? Because they prefer going it alone, to the great joy of those who are selling and buying their supplies and produce, and to their own sorrow and degradation.

The United States Government, with all its brain and money, cannot save the farmers. *There is but one salvation for them. They must unite and co-operate, work together for the interest of farmers and let others attend to their own business.*

When they all do this, the question will be, "What's struck the farmers?" Then farms would no longer be a drug on the market at a 50 per cent. valuation.

A. A. Co., Md.

W. H. G.

#### Opportunities for Tobacco Culture in Maryland.

Major R. L. Ragland, of Henry county, Virginia, the best authority on tobacco, thus gives his views as to the possibilities of improving the tobacco culture in this state:

"The origin of bright yellow tobacco dates back about sixty-five years, when enterprising planters in Halifax and Pittsylvania counties, in Virginia, and Caswell county, North Carolina, commenced curing their crops by fires and with charcoal. Its progress was slow. For thirty-five years after planters had been successfully producing this type in the counties above named had elapsed before planters in Granville county, N. C., now probably producing the largest product of bright tobacco of any country in the United States, commenced to raise this type. The question naturally suggests itself, if the bright type is so much more valuable than the dark, why was the production of the first so long confined within a circumscribed area? We answer because it was for a long time thought that the soil capable of producing this type was to be found only where it originated. But by degrees the circle of its culture widened, as exporters extended their operations, when it was found that skill in curing was fully as necessary as adaptability of soil to achieve success in yellow tobacco production. Only recently has it been demonstrated that large areas in eastern Virginia and eastern North Carolina are capable of producing fine brights, when grown and cured by experts managing this class of tobacco. All over the areas named efforts time and again had been made to grow the bright type, but failed, mainly through lack of skill in curing.

"The 'spangled yellow' grown in western Maryland long ago demon-



strated that finer and brighter tobacco could be produced by flue curing than by the old method. The soils of eastern Maryland, both geologically and topographically, are much like the soils of eastern North Carolina, where yellow tobacco is now being quite successfully raised. And knowing the apparent adaptability of these North Carolina soils for producing brights, we predicted years ago that they were capable of growing fine brights, and the prediction has recently been verified. Why Maryland soils of like characteristics with those of North Carolina have not produced tobacco of the same type and quality as produced there is simply because like efforts and methods as those used in North Carolina have not been used in Maryland—lack of development by the non-use of the proper means. The soils of Maryland have only to be tested by experts to prove their adaptability for producing the same classes and types of tobacco as are grown in Virginia and North Carolina—the very best paying crop that any lands anywhere are capable of producing.

"The varieties in use in Maryland are less objectionable than the methods, and the finest bright varieties that were ever grown are as incapable of producing a fine salable product under present Maryland methods as 'Long Green,' 'Big Frederick,' or 'Bull Face,' if planted on the finest gray soils of Virginia or North Carolina. A change of methods in Maryland is more imperative than a change of varieties, for it is possible to cure the product of her native varieties, bright and of fairly good quality, by improved methods, but the product of no variety, however fine, can be made of a desirable high selling type subjected to the old methods of burning and curing. Maryland's greatest need in the production of bright yellow tobacco is skill in curing the crop.

"In this connection I am pleased to learn that Major H. E. Alvord, director of the Maryland Agricultural Experiment Station, takes this view of the question and is arranging for the employment of an expert to superintend the station experiments in this line, and to teach Maryland planters the art of curing bright yellow tobacco at the barns.

"Such a course is more likely to eventuate in the successful inauguration of the yellow tobacco industry into Maryland than through any other course of which we can conceive. To go on raising tobacco of the old types and classes in Maryland is to surely impoverish both planters and soil to an extent that will lead to its utter abolishment, and to attempt to raise newer, better and more salable types without pursuing the methods best devised for their productions, is to invite failure that will result in loss and disappointment.

"Judging, however, by what is being done in Maryland to thoroughly arouse her planters to the neces-

sity for a change in making the tobacco planting industry more remunerative, in the efforts of her planters to procure the bright varieties, in preparation for curing by improved methods and fixtures, and to employ experts to teach improved methods practically, we are encouraged to hope for such measure of success this year as will soon bring Maryland into the eastern bright tobacco belt along with Virginia, North Carolina and South Carolina.

"The yellow tobacco planting industry cannot be taught on paper. The teacher expert must go into the field, direct the work of production, housing, curing, assorting, packing and pricing by practice rather than theory, and when all this work has been done in the presence of apt pupils desiring to be taught, Marylanders will acquire the art of raising crops that will sell for more money than any others which her soils are capable of producing, for it has been demonstrated, as can be shown by warehouse sales, that whole crops of brights have sold for an average price running from 20 to 60 cents per pound, averaging from \$200 to \$1,000 per acre. At such prices what other crop can compare with yellow tobacco? Why should the Maryland planter be dependent on a fickle, fluctuating and uncertain foreign market that at best offers prices which leave no profit to planters, when the home market is paying three and four times greater prices for what is rarely an over supply—good bright manufacturing goods?"

I have read with much interest this communication of Major Ragland, on the origin and extension of the culture and curing of yellow tobacco in the states of North Carolina and Virginia. I look upon the Major as one of the leading men of this country on the subject treated of.

In this article he highly recommends the adoption of the system of curing tobacco in Maryland which has been practiced for years with so much success and profit in the states above named. I fully agree with him that there is much land in lower Maryland that is fully adapted, under judicious management and the curing by the flue process, that will produce an article of yellow tobacco, not much inferior to the famed yellow tobacco of the border counties of N. Carolina and Virginia.

Many years ago, I visited and examined some of the fine tobacco lands in the neighborhood of Danville, Va., and found, upon a close inspection of the character of our soils, that they differ but little in appearance from the gray, sandy soils of lower Maryland. I most heartily concur in the opinion so well expressed by my friend, Major Ragland, in his article—that much of the lands in the five or six tobacco counties of this state are capable of producing a superior article of tobacco of the yellow type. And I

would urge upon the enterprising tobacco planters of this state, having soils of a sandy character, to at once fit properly-constructed barns and adopt the process practiced with so much success by our neighbors of the south. I write this hurriedly, and may, at some early date, give my views on this important subject. Calvert Co., Md. G. W. DORSEY.

[We hope our friend, Dr. Dorsey, than whom there is no more intelligent, practical and sagacious planter in this state, will not fail to do our readers the favor proposed. Eds.]

#### Ways of Growing Corn.

When you want to know anything about farming and don't find it in your agricultural paper, ask for it. We had been studying hard to find out what chemicals to put in the ground to make a big crop of corn, and had to give it up and ask. It came from the North Carolina Station, and so plain that a white-grounder could not err—we hardly expected anything from the Maryland Station, they being so busy just now trying to find out what there is in corn stalks and possibly roots, that when made into a hash will keep the breath in an animal having been in the habit of feeding on grain. We prefer to grow it for the grain instead of the stalk. In North Carolina they know how to grow it for the grain, and think they know what to do with the grain when grown.

An old lady in our neighborhood, that was brought up and always fed on Johnny Cake, thought it was beginning to disagree with her and complained that her stomach "kind'er went agin' it." Her doctor recommended a trip to North Carolina, where she had relatives. She went and soon found relief, and said it was the way they managed the corn in that country, that suited her exactly. Instead of taking it to the mill and having it ground, they carried it to the highest part of the mountains, in some secluded spot, and boiled it when the moon was shining, then brought it back in jugs. Very soon her stomach was in a condition to take in a good deal of it. The professor must have been thinking about some of his own people when he was afraid I was stimulated and sitting on the fence. The old lady's experience sitting on a fence, with corn aboard the way it is served in North Carolina, is that the ground looks like it was coming up to meet her.

If the professor will tell us how to grow 12 to 15 barrels of corn to the acre (as we can with manure) with chemicals that won't cost as much as the corn will fetch, we will take care of the corn and make it into dough and bake it, instead of the liquid state; and if he should come along our way and ask for an old fellow that spells his name with a big E in the middle, we will slip down from the fence and treat him to some first class JON E. CAKE.

#### Poultry Yard.

##### Advertising.

I would like to give the poultry breeders among those who read THE AMERICAN FARMER a few hints learned from an experience covering a number of years in the business. There is an opening in this section for wide-awake energetic breeders of thoroughbred fowls who have good stock to sell of the popular varieties, and possess courage enough to exhibit and advertise it properly. This department of our agricultural fairs and other exhibits of fine poultry made in this state have always been filled with stock of the very highest quality, all raised here. However, very few of your readers seem to know that they can purchase first-class stock of almost any popular variety of fowls near home. I am constantly receiving letters from writers who want to know where they can get stock or eggs of some variety of fowls which I do not keep. I think the poultry breeders in this state and the adjoining territory would advance their interests if they used a little printers' ink and advertised their fowls judiciously.

The poultry exhibition is well enough in its way, since it is impossible for a breeder to establish the quality of his stock unless he allows it to compete before an experienced judge with the best specimens of that variety, and thus prove its superiority, but it is only by subsequent advertising of such victories that a profitable business is built up in the sale of eggs and fowls. I have found, as a rule, that the chances of obtaining satisfaction in buying thoroughbred fowls decrease as the square of the distance increases; therefore, I imagine that if the many in this state who want good stock, knew they could get it near home, very few of them would send away for it. But bear in mind, if you are a poultry breeder, that very few besides your immediate neighbors will ever know that you have good stock to sell unless you exhibit and advertise it properly. H. R. STEIGER,

Laurel, Md.

#### To Feed for Eggs.

There has been a very great complaints in some sections about the hens not laying as they should.

I think every case can be accounted for. I was recently called in to see a lady's flock of eighty-eight hens that were looking, to say the least, fine, yet she said she was not getting as many eggs from them as I was from a pen of eight that were always confined in a yard 8x20, with a tight house 5x5, and hers had free range. I purchased a dozen from her and after killing a couple I found that her hens had not sufficient food to produce eggs.

While this I believe to be generally the cause of failure of eggs, yet it is not always; some feed too high, and not that food which will



produce eggs. I have been for some time experimenting on what kinds of food will produce best results, and have found the following by far the best: Bran or barley in the morning scalded with milk; give all they will eat up clean. In this, we have that which is generally acknowledged to produce the greatest per cent. of the white of an egg, and very little fat.

At noon feed wheat or screenings. In this, we have the lime for shell, and also a good per cent. of the yolk. Give all they want, and if you have an ash or manure pile mix a little in for them to scratch after.

At night give a liberal feed of corn, and do not be afraid of making too fat. I do believe, contrary to the opinions of some, that corn will produce eggs, and lots of them, especially in winter.

Feed beef scraps every other day (cooked), and plenty of bone meal, with a liberal supply of green food every day.

Hens fed in this manner must lay, if they are any good at all; if not, get rid of them. An old saying, and a true one, is that a hen properly fed must lay or get fat.

Of course, this will not apply though moulting time.—*C. Cackles.*

### Horticulture.

#### Why Be Without Strawberries?

Has any family on a farm been getting along without a generous supply of strawberries in their season? If so, let us suggest in all kindness that the head of that household make a new departure in this nick of time, just to realize before it is too late what satisfaction and enjoyments can be secured from the expenditure of a very little money and labor. A dish of ripe strawberries with cream such as the farmer may always have—what article of food more tempting, grateful and wholesome? Better than the orange, the pineapple or the banana of the tropics. And why deny yourself of such a luxury, especially when you have to wait but one year after planting for a full fruitage? As soon as the weather will permit to get ready a piece of ground of a deep loam not too heavy, by making fine and level, mark out with the hoe or plow shallow furrows three feet apart. Fertilize with compost of rich scrapings free from hay seeds, poultry manure, and bone dust or a good super-phosphate. Set the plants in the row fifteen inches apart. Hoe well and maintain clear of weeds all the season and keep the runners cut off except those between the hills. The work is not difficult, and it will return you a big percentage of returns in pleasure, satisfaction, health and profit.

#### Strawberries.

A. Oemler, of Georgia, who has recently issued a work on truck farming, writing in the Agricultural Report for 1885, thus speaks of

strawberries: Moisture being indispensable to successful strawberry culture, a soil should be selected most capable of supplying that requirement; and, indeed, a deep, rich, black loam, made friable with an abundance of decaying vegetable matter, is best for this crop. It will not stand as heavy manuring at the south as at the north without going to vine at the expense of fruit. If stable manure is used it should be well rotted. To plant on a large scale they should be planted in rows  $2\frac{1}{2}$  to 3 feet apart, the plants to stand 18 inches apart in the rows. Clean culture from the time of setting the plant to gathering the second crop is indispensable. After the last working and before the plants bloom they and the intervening space should be mulched, both to keep the fruit clean and that the crop may derive the other advantages of the covering. Pine straw is that usually applied at the south.

Strawberries, as far south as Charleston, should not be fully ripe when picked, and then be picked direct into the quart baskets, if possible, to avoid too much handling, that bruises them.

A Tennessee analysis gives the following as their composition from which the best fertilizer to use on them may be determined:

Water, 90.52 per cent.; dry matter, 9.48 per cent.; of which glucose, 4.78 per cent.; cane sugar, .58 per cent.; free acid as malic, 1.37 per cent.; ash, .62 per cent.; crude fiber, 1.55 per cent.; ether extract, .64 per cent.; crude protein, .99 per cent.; non-nitrogenous extract, 5.76 per cent.

In Massachusetts, at the Agricultural College, the following varieties have been tested with annexed results:

Amherst, Crescent, May King, Sharpless, Belmont, Miner's Prolific, 2 or 3 years; Jessie, Bubach, Gandy's Prize, especially commended.

Ohio, general planting: Bubach, Haverland, Ohio, Pearl, Crescent, Warfield.

Tennessee, as in order given: Prince of Berries, Sharpless, May King, Bidwell Parry. For quality, productiveness, salableness, in order named: Sharpless, Jumbo, May King, Indiana, Jersey Queen.

Kentucky. Market, worthy of trial: Jessie, Bubach No. 5, Haverland, Warfield's No. 2, Itasca, perhaps Gandy's Pride; family use: Jessie, Warfield's No. 2, Itasca, Crawford, Henderson.

Arkansas. Early: Logan, Sharpless, Miner; medium early: Daisy, Cloud, Crescent; medium late: Warfield No. 2, Bubach No. 5, Louise; late: Eureka, Haverland, Glendale; longest in bearing, producing most berries at beginning and end of the season: Jersey, Captain Jack, Eureka; home garden: Sharpless, Haverland, Bubach No. 5, Crescent, Warfield's No. 2.

Virginia. Home use: Bubach No. 5, Haverland, Sharpless; also,

Belmont, Bomba, Crawford. First season, Jessie, Price.

Ohio. Market: Bubach, Eureka, Haverland, Crescent, Warfield; size rather than quantity—home use or market—Cumberland, Crawford, Gandy, Louise, Lida, Miami, Pearl; new varieties, most promising: Enhance, Farnsworth, Ivanhoe, Middlefield, Muskingum, Michel's Early, Parker's Early, Shuster's Gem, Waldron. See vol. 2, No. 6.

Wm. Parry, N. J., recommends spring planting, putting in rows  $2\frac{1}{2}$  feet apart, manuring with marl, ashes, and bone, one ton to three acres. In fall, mulch with stable manure, spreading evenly between rows to prevent plants throwing out by frost. He says there is difference of productiveness as to soil, climate and treatment, as some varieties succeed well in some sections and not in others.

The Ohio experiment station announces its conclusions as to strawberries thus:

1. It is not worth while to seek for varieties that are adapted to particular soils.
2. The most productive varieties are those that have a long season; i. e., give a comparatively large number of pickings.
3. Very early and extremely late varieties are less fruitful than the medium early.
4. Perfect flowered, as a rule, are less productive than the pistillate or imperfect flowered varieties.

#### In the Orchard.

MANURING ORCHARDS.—We believe that all successful growers of the apple will sustain us in the assertion that this fruit is as dependent upon a liberal use of fertilizers, other circumstances being favorable, as is a good crop of corn, clover or wheat; and yet how many go on from year to year realizing but meagre returns from their orchards set out long ago, either by themselves or by those who went before them, and wondering why the returns are no greater! What is the trouble? Simply, in most cases, that the trees are kept down to short rations—in a word, starved. They look badly, make but little growth each year, and apples are small, pinched and scabby. Insects are preying upon trunk, limb and leaf. To make pulp and seeds for the fruit there is a large draught upon the vitality of the soils, and this must be continually replenished. The fact is, orchards need as much manuring as any other growing producers on a farm. Apply barnyard manure, lime and ashes from time to time, and note the difference in the appearance and fruitage of trees so treated and those which get no help from the manure pile, and supplement the fertilizing with careful pruning and whitewashing of the trunks of the trees. The wash may be colored if the glaring white is objectionable.

GRAFTING.—There is almost always a number of trees in every orchard of apple and other kinds of fruits which are not satisfactory in their fruitage. This is either on account of a failure in the nurseryman or agent in not furnishing stocks true to name, or on account of want of adaptation of varieties to climatic conditions. The mistake may be remedied to some extent by top grafting in of known good and desirable varieties for the particular locality. We have seen excellent results from this step in orchards, and the experiment is so simple and inexpensive that we have often wondered that it was not oftener resorted to. Whoever would make a trial of it this spring should cut the grafts at once, that is, the new varieties to be inserted into the old stocks. Wrap them in damp moss or hay and cover with a light layer of sand in a cool, moist place—in the cellar, for instance. The reason for doing this is that it has been found that the grafting is more successful when the stock to be grafted into is a little more advanced than the new stock or slip. Choose thrifty shoots of last year's growth, and cut from lowest branches. In our next number we will give full directions for doing the work of grafting, also for making the wax and every thing else necessary. Provide scions for plums and pears.

PRUNING.—If pruning is to be done in the orchard attend to the work before the buds swell. Never cut out a branch without having a reason for it, and also strive to give the trees a low, open head to enable them better to withstand the strong winds, to shade the trunks and to allow the sun and the air to reach every part of the boughs. If the orchard is to be cultivated the heads will have to be kept higher to allow the teams to pass under them.

#### Planting an Orchard.

I see an article in the February 15th number of your paper on laying off an orchard and varieties of trees to plant. My father and myself planted two orchards in America since we came out from the county of Kent, England, in 1873, one in Indiana on the prairie, 80 miles south of Chicago, and one down here in the fall of 1883. The way we prepared the land was, as soon as we bought this farm in 1882, we sowed the wheat stubble of the man we bought from, by his permission, in buckwheat, with about 250 pounds of bone phosphate per acre, and sowed clover with it the last of July or the first week in August, and got a good stand of clover for the next year's cutting. There were ten acres in the piece, which was the best land on the farm, and would bring about five or six bushels of wheat per acre. We cut about four acres of the buckwheat and threshed about nineteen bushels from the four; the other was not worth cutting. The next



summer we cut most of the ten acres, and it averaged about three-quarters of a ton of hay per acre. After the second growth had started well we laid the field off in lands forty feet apart and plowed a ridge about six or eight feet wide at every forty feet one way; then later on we cut the lands between for second growth hay, and in the fall reversed the plowing, leaving a dead furrow where the ridge had been. We got 500 new sawed laths and laid it off the other way, measuring up the dead furrows and sticking a lath every forty feet. We had one man to help us sight the laths, my father sighting one way and I angleways, and the man to move them in line, so that we got them so perfect each way that if you looked down the rows either way you could see but one lath.

We got a fence board about twelve feet long and bored a one and one-half inch hole in either end, and half way between the holes another, which we opened out with the saw on one side; we then started to dig the holes, first placing the board so that the lath went into the notch, and drove two small pegs through the holes in the end of the board, lifted the board off, leaving the pegs in the ground, pulled the lath up and dug the hole about three feet across and eighteen inches to two feet deep; then moved on to the next, always facing the notch in the board the same way. After digging all the holes we hauled some fine manure scrapings from the yard and around the old buildings, and having a lot of old plaster, mortar and small pieces of brick from the basement of the old house which was burnt before we bought the farm, we put two or three shovelfuls of each at every hole. We got everything ready, and about the first week or so in October, 1883, I took our list of trees up to a Washington nurseryman, having been up before to see his trees during the summer. I got up to Washington on Thursday, commenced digging my choice of the trees on Friday, got them packed and on board the boat Saturday evening; came home on Sunday, sent for them Monday morning, and had them hauled in the same day. I got all young trees, having tried some older trees in the first orchard and they did not live as well as the young ones.

We commenced to set the trees at once. Taking our board with us, we dropped it over the two pegs, which brought the notch where the lath was, put the tree up into the notch, which held it in place. We filled up the hole with some loose dirt to get it the right depth for tree before putting it in. I got down and spread out the roots nicely and mixed some of the fine manure and plaster. &c., with the dirt as we filled in, firming the dirt all the time among the roots and rounding it up a little.

The orchard was left in clover the first year, except the six or eight feet lands, which were worked with a one-horse cultivator; it has since been used for trucking, and again seeded to clover with a wheat crop. In lands between the trees last year I got eighteen and a-half bushels of wheat per acre, so you see I have improved the land, and the trees have made a fine growth. All the orchard is planted in apple trees, except around the outside, where twenty feet from the outside row of apple is set a row of peach on the two longest sides (it is about twice as long as wide). The outside row next the house is mixed with apricot, nectarine and peach. There is an intermediate tree in the outside rows, making them twenty feet apart in the row. The number of trees in the orchard is 270 apple trees, forty feet apart; 139 peach trees, twenty feet apart; 10 apricot, twenty feet apart; 10 nectarine, twenty feet apart. We have also a long avenue from the gate to house of standard pear and cherry, and a few dwarf pear, ornamental crab and cluster cherry on the lawn, about forty pear and forty cherry.

We enquired of the old inhabitants which they considered the best apples for this part of the country, so we got some of the old varieties, such as the Summer, Fall and Winter Cheese, Smoke House, Horse, Cathead, Limbertwig, Ben Davis, Nansemond's Beauty, York Imperial, Red Astrachan, Early Ripe, Smith's Cider, Winter Queen, American Pearmain, Pilot, Wine Sap, Carolina Red June, Early Harvest, Waugh's Crab and Hewes' Virginia Crab, quite a large assortment. We have had some apples for the last four years; have just about finished eating the Wine Sap and Limbertwig we put away last fall, besides having all we wanted to use in the summer. Hope to have a nice lot this year.

We also bought an assortment of fifty trees for the two cabins on the farm for the hands, so that they would not bother our orchard. I am afraid I have written too much, so will defer a description of the vineyard to another time, also wine making, if you think it worth printing. [We certainly do. Ed.]

CLIFFORD H. CONSTABLE.

Richmond Co., Va.

#### Prune Your Peach Orchard and Help to Save Millions.

After visiting several parts of Maryland and Delaware, famous for vast peach orchards, and observing the methods of care and culture, I discovered at least one reason for the short life of the tree, as reported to me by many growers, not stricken by yellows, and a reason why many shippers realize such poor prices for their fruit.

It is summed up in brief by saying that the orchards in most cases are not properly pruned or not

pruned at all, and in many cases receive no culture or manure. I am positive that this neglect, carelessness or ignorance as to the best methods of pruning, is the cause of the loss of probably a million and a half of dollars to the growers of the peninsula every year. We have it from good authority that there are 10,000,000 trees on the Chesapeake peninsula alone; that they yield about 1½ baskets to the tree, and that Whites bring from 50 cents to \$1.00 and Yellows \$1.00 to \$1.50 per basket. Proper pruning means a uniform size of fruit and from a-fourth to a-half increase of size, and therefore about one-third more in price. The large-sized fruit is what pays the grower and middleman. From these figures it might look like the growers are losing \$5,000,000 annually. It is simply difficult to calculate the real loss. The longevity of the tree attained by careful pruning is a large factor of wealth and value. I will assert here that experience will prove to every grower that properly pruned and otherwise cared for trees will live at least twice twelve years, the present average life of a tree under poor treatment. What would this be worth to the grower? Who can calculate it? When properly computed, who would not be more than surprised? We would be tremendously astounded, and I believe the effect would be to awaken us from our lethargy and cause us to climb out of our old ruts into a wayside of careful, watchful culture and judicious pruning. To begin with, most growers make a great mistake in not cutting off the whole top of the tree to within sixteen inches of the ground when first set out. They leave branches on the young tree four feet above the ground, having about forty or fifty buds upon them to be supported by the first efforts of a tree to establish itself. The first thing a tree does is to furnish itself with roots, then it proceeds to make leaves and wood above ground. Therefore, without giving all the prefatory reasons, I will give below a plan of pruning that I have advocated at many meetings this winter in different parts of the state of Maryland.

The sap should all be concentrated upon the roots and five buds, instead of forty or fifty. Cut the young tree off to within twelve or sixteen inches from the ground, leaving five good buds at the top of the branchless stub. As these buds begin to grow in the spring watch that some of them do not outgrow the rest and stunt the weak and make too heavy a growth themselves. They can be held in check by pinching with the thumb-nail and first finger the tip ends of the most vigorous branches when they are about a foot or more long. One pinching usually is enough to keep a tree well balanced.

During the winter after first season's growth the pruning shears should be freely used. Now is the

time to give future strength and shape to the trees.

The main point now and at every future pruning is to keep the tree full of fruiting branches from within a foot of the ground to the top of the tree, and not to let the tree grow all to "top." There is a mistaken idea prevalent among growers that the lower parts of the main limbs must be kept cleared of every branch or twig and entirely bare. They prune in the lower part of the tree and let the top go. This is a sure road to early death and ruin. It is shown in the forest and in all nature that as soon as a tree reaches its maximum height or natural terminal growth, that it then dies. As much, then, as this can be prevented by man, so much longer will the tree live and thrive if well cultivated and fertilized.

Hence the second pruning must rid the tree of all of its growths farthest from the roots; that is, the topmost or outer half, two-thirds or one-third, depending on position on the tree, of the past season's growth, must be removed. This means that not only must the main branches that grew from the five buds be cut back from one-third to one-half of their length so as to leave strong, vigorous stubs about a foot long, but all twigs growing on the sides of these stubs must also be "shortened in," so that they will form fruiting branches for another year.

This "shortening in" process must be used with judgment and with reference all the time to the fruit and wood buds. The fruit buds are large, full, plump, soft, blunt fellows, located mostly along the central part of a twig. As a rule, I prefer fruit to be borne at the ends of twigs than toward the base, and wood branches to grow from the base of twigs or branches. These wood branches become the fruiting wood for the following year. The pruner should have in mind that the number of fruit buds should be lessened by pruning away a part of them. Often a small twig has attached to it twelve or fourteen fruit buds. This is four times too many for the strength of the twig to support. Moreover, the twig at the time of blooming would prove too weak to support them, and three-fourths or more of the flowers would not set fruit. This vast quantity of blooms coming on to a tree in so short a time in the spring weakens the tree to such an extent that the fruit that does set is small, insipid and worthless.

The pruning every year after the second year is virtually the same as the second pruning—a cutting back of the past season's growth, keeping the branches short and strong, full of fruiting wood from their bases all along their sides to their tips, and reducing the fruit buds by cutting off the twigs bearing them about in the middle. This also gets rid of the terminal buds, which always outgrow all side buds if left untouched, and thus



make, as we see in our short-lived orchards, long, fish-pole-like limbs, full of small dead twigs below that have been starved out and that would have been fruit-bearing if treated as directed above.

As for old trees, do not remove a number of large limbs with axe or saw. Of course, all dead limbs must be removed down to living bark. Every limb when removed must be cut off close up to the branch to which it is attached or back close to a living side branch.

In renovating an old orchard work on the top first and cut back every limb to a young, healthy side branch that is much nearer the roots than the tip of the branch; also shorten in this side branch a-half or a-third of the past season's growth. Do not remove all the wood that you intend to remove to make them more perfect trees. After "shortening in" moderately, it will be found that a season's growth will have given a great change, so that the process of "shortening in" of the old limbs can be carried on farther down. Other new, fresh growths will have taken place on the old branches, and some of their ends can be removed a foot or more from the tip or place where it was cut off the previous winter. This is all that can be done for old trees, but it will astonish anyone who has not tried it what an immense change it will bring to an old orchard.

With this pruning there should follow good culture during the spring and summer, together with the application of three or four pounds of good wood ashes, or a potash equivalent, and about three pounds of fine bone meal, or a phosphoric acid equivalent. If the ground is quite light and sandy a dressing of stable manure of fifteen tons to the acre would be needed. Cultivate six to eight times during a season and the results of splendid luxuriant growths, healthy masses of leaves and prodigious fruit will be the result.

Scrape the trees so as to remove all old scales of the bark, and clean out all old sore cavities in which borers delight to deposit their eggs. Remove all short stubs of branches, that may be on the body or branches, close to the collar of the branch, and trim the edges of the sawn surface with a sharp knife till green bark is reached. Such places will then heal over and no longer irritate the tree. When May 1st comes paint the bodies and main limbs with the following mixture made as thick as paint:

One quart soft soap.

Four ounces sal soda, dissolved.

Wood ashes can be quite well substituted for the sal soda.

Paint your trees again about June 1st and you will not be troubled with any borers. There are three borers that attack the peach, and the female of each lays her eggs in May, June and July on the trunk and limbs of the trees.

The above wash, if applied every season on the given dates, will form a sure preventive, and will also clear your trees of "moss" and other parasitic plant growths. Now is the best season of the year to prune and scrape your trees, and every grower will save his orchard from a premature death and produce the finest possible fruit who attends to this all-important question.

THOS. L. BRUNK.

Horticulturist, Md. Agricultural Experiment Station, College Park, Md.

#### Horticultural Notes.

The last year was a remarkable one to the fruit grower on account of the almost entire failure of the fruit crops, but it is worth noting that one variety of pears at least bore a full crop, namely, Hovey's Dana. This variety is very scarce this side of the Rocky Mountains. It is a winter pear, the size of the Seckel, with a flavor equal to that variety. A fruit dealer on Charles street has been getting this variety the last two years from California under the name of Winter Seckel. It sells well on account of its high flavor, and deserves to be better known and more grown.

In Maryland, amongst the currants, Fay's Prolific has proved valuable on account of being the most productive of the large fruited varieties. The Erie blackberry has come to stay. Although the berry resembles the Lawton, yet the habit of the plant is more branching, hence more productive and very healthy.

Amongst the grapes, the Elvira and its kindred are still the only ones that with me do not get the dry rot, and I still hold fast to the theory that a dry season, say from the time they bloom until they begin to ripen, is the only cure for it; yet we may say that years ago we had wet seasons and they did not rot. Now, can it be that after being planted a number of years, that they absorb all of a certain element in the ground which is necessary for their resisting power? Last year I used six tons of wood ashes on three acres without much benefit, so far as fruit was concerned. Mr. Liebig kindly analyzed the ashes for me, and found them very low in potash, the very article I wanted, so I have gone to work this winter and put on two tons of kainit, giving one row of Concord an extra dose in order to see if it is for want of potash, as it is not for want of barnyard manure.

Amongst the novelties of flowers last year the Italian Carnation Marguerita, so named after the queen of Italy, is a very valuable addition. They have all in common with the well-known Monthly Carnation in fragrance, color and size, with the advantage of blooming in four months from time of sowing the seed. Seed sown in March will bloom in June and keep on blooming until the hard frost stops them.

Baltimore Co., Md. JOHN COOK.

## The American Farmer

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At the office of THE AMERICAN FARMER are located the offices of the following organizations, each of which its proprietor, Wm. B. Sands is Secretary:

Maryland State Immigration Society.  
Maryland State Farmers' Association  
Maryland Horticultural Society.  
Maryland Dairymen's Association.  
Maryland State Grange, P. of H.

BALTIMORE, MARCH 15, 1891.

#### Early Potatoes.

The price of Irish potatoes from their great scarcity now rules very high, and must advance still more as the supply on hand over the country diminishes, for the next harvest of this indispensable vegetable is yet some four months off. In view, therefore, of this circumstance, we think the farmer who makes arrangements for planting a good breadth of early potatoes will act wisely and be well repaid for his trouble, especially if he complies, so far as in his power lies, with the conditions necessary for making a good crop. These are, the selection of the right piece of ground, its thorough preparation before planting, and such skillful after-cultivation as will insure success. Many probably will not plant so largely as usual on account of the high price of seed—at present about four to five dollars per barrel—which will be another factor in making the new crop a paying one.

From what we can learn the Rose is still the choice of cultivators generally, though several new varieties which have given good promise during two or three previous years, notably the Early Queen, the Early Maine, Early Ohio and Beauty of Hebron, will be extensively planted.

#### Repairing Roads.

To explain our idea of the contract system which we have recommended for the repair of public highways, we submit the following:

Here, for instance, is a road ten miles in length. Now let this road

be divided into ten sections, and let the road commissioners or supervisors make out specifications for the keeping in repair of these several sections, and at an appointed time go over the grounds with responsible parties desiring to contract for the work to be done, just as for the digging of a canal, or the building of a railroad, and then and there make all needed explanations to them for its proper execution, and either at the same time, or at some appointed time subsequently, let out the sections to the lowest approved bidder.

It might be, that one contractor would take several adjoining sections; or it might be that several contractors together would take the entire road. As roads are now and have been managed in most sections of the country, the work is nearly all done, say during a period of one month in the year, when farm business is least pressing, and from that time on to the same period in another year, generally but little more attention is given to repairs; for the appropriated moneys have been used up, and nothing remains for further operations, no matter how much need there may be for them in the long interval, until more taxes are available. Washes by heavy rains may occur, sluices and drains may need opening to divert the waters from the drives, boulders and cobblestones may hinder good wheeling and injure horses' feet; but what is everybody's business generally is nobody's in particular in such cases, and the ways for the want of a little attention, in the nick of time to save a great deal of work at some future season, rapidly lapse into a bad condition.

Most likely the contractors would be, in addition to their interest in their prospective contract pay, as much interested as everybody else in having good, smooth ways to travel over, and so, would hardly fail to perform their parts well. As they had occasion to pass to and fro over their respective sections through the year, they would be prompt to note where any little work was urgent and needed to fulfil their obligations, and could do it at once. It is this stitch in time which accomplishes so much in the long run. The dykes of Holland which prevent the waves of the ocean from drowning tens of thousands of the inhabitants of the reclaimed lands, must be watched day and night, so that the least occurring leak can be seen at the moment and stopped without delay.

We are well aware that we shall be met at the outset of our recommendation of this contract plan for favor, by the old objection of burdensome taxation; and we are not going to disguise the fact that much more money will be needed than under the old system for the first year, and perhaps for the second year, but after the roads shall have been put into requisite shape, the expenses from year to year thereafter under the new system would be but little more than under the old one.



No taxes levied for the improvement of the public highways should be considered as oppressive by a community, or be given out with a grudging hand, only provided they are honestly expended. If applied judiciously they will surely come back to reimburse the giver and that at no distant period. They will come back in many ways, especially in savings from wear and tear of horses and vehicles. They will come back in the comfort and satisfaction always to be derived from easy travel and transportation. They will come back in the consciousness that progress and improvement are steadily setting in, to take the place of the old stand-still, atagnant policy of letting things drift as they will. They will come back in the enhancement in value of lands and homesteads. Go where you will, in any country or neighborhood, you will find good thoroughfares a sure indication of thrift, and every community can and may as well have them, if they will co-operate and work unitedly together.

#### Seasonable Topics.

**TOO EARLY PASTURING.**—Nothing is made by turning out the cattle to pasture so early as some farmers are in the habit of doing, but, on the other hand, great injury is often done to the herbage when it is so young. Let it get well established before pasturing, even if you have to buy hay for the stock for a while longer; that will be cheaper in the end.

**CLEAN THE MOWING GROUNDS.**—While the ground is not yet fit for plowing, the leisure time may be turned to good account by clearing the mowing lands of stones, old stumps and other hindering things in the way of the mower. Every farmer knows how vexations it is to break his machine by contact with these obstructions so easily removed. The time can be better spared in the leisure of the present than it can in the hurry of harvest, waiting for the machine to be carried to the smith's for repairs. This is one of the farmer's economies so necessary to his success. "Many a mickle makes a muckle," says the Scotch proverb.

**THE HOT BEDS.**—Now that the hot bed has been made, give it all needed attention. Cover well with mats or straw at night. Do not uncover in the morning until the sun is well up. Put on the covering as soon as the sun ceases to warm through the glass. As the plants make progress lift the sash a few inches and give them some air when the milder days come on. When watering is needed sprinkle with tepid water.

#### Proposed Amendments to the Constitution of Maryland.

The amendments proposed by the last Legislature to be submitted to the qualified voters of this State for adop-

tion at the general election next November, are six in number. Five of the amendments make changes in the constitution and one is a substitute for the present article 15 of the Declaration of Rights upon the vital question of taxation.

The first relates to the Governor's veto power, and, if sanctioned by the voters, will enable him to veto part of an appropriation bill without withdrawing his sanction from the whole. In other words, he can strike out obnoxious items from appropriation bills and not kill the whole measure.

The second proposes to forbid any change in the charter of any existing corporation in the State, unless it surrenders its claim to exemptions from taxation, or from the power of repeal or modification of its charter, when asking for extended privileges and franchises. This enacted will compel railway companies and similar corporations to maintain their present position or submit to reasonable taxation.

The third simply and briefly gives the General Assembly the authority to say what property shall be taxed, to set the rate, and enjoins only that taxes upon the same class of property shall be uniform.

The fourth amendment provides that county commissioners may be elected for a term of six years instead of two or four, as now provided for.

The fifth gives the Board of Public Works the authority to sell any interests the State may have in works of internal improvement. The sixth refers to the taxation of mortgages, and gives the Legislature power to levy the tax where the property mortgaged is located.

**MUCH BETTER OFF.**—The Montgomery County Agricultural Society is fortunate in having in its treasury one thousand and twenty-five dollars, instead of only ten dollars and twenty-five cents, which the types made it in our last issue.

We think we do all butter-makers a service in calling attention to the parchment paper of Messrs. A. G. Elliot & Co., advertized in our column. It is intended as a saving of time, money and trouble, is air-proof, tasteless and odorless, and its producers are so well satisfied of its merits that they offer a half ream free to all who send a trifling amount to pay the postage, and agree to use it.

**MR. G. O. WILSON'S** horse Cabash is a model as to appearance, has made a splendid record, and possesses the power of transmitting his good qualities and handsome looks in a remarkable degree. His owner makes a very generous offer for colts of his get, and we commend to the attention of our readers his advertisement on another page.

#### HOME DEPARTMENT.

##### The What To Do Club. OUR MOTTO.

Do what you can,  
Not what you cannot;  
Not what you think ought to be done,  
Not what you would like to do,  
Not what you would do if you had more time,  
Not what somebody else thinks you ought to do.  
But, do what you can.

We are ready to welcome all the other halves of our sisterhood. There is nothing exclusive about us, and variety is known to be the spice of life. We are not prepared, however, to believe that the man of all-work is more competent to put things in their places than TRY AGAIN or any other woman with a level head and an eye to order. I fear *the other half* does not have a place for everything—as he should—in which case no wife can put things in a right place, and a man will only admit that things are right when a man does them. We will do what we can on the lunch question in our next number.

CERES.

TRY AGAIN wants us to try our hand on the lunch question, and, as I have served an apprenticeship in that line, I will try what I can do for her.

In the first place, I hope she is an economist, for to be that should be the keynote of our constitution. I mention this in connection with her plaint on the subject of napkins. Because there is so great a probability of the set being broken, if some go to school and others to a neighbor's house over a tit-bit, that we think good enough to send occasionally. I have a habit of taking the borders of nice tablecloths, after they have served their time in that capacity, and making of them real nice napkins; they wear a good while, do up so nicely that no one suspects their origin unless they spread them out to examine the pattern; then if they return to me no more, I am not checked in any benevolent design by the dread of having my sets broken.

The material part of the school luncheons is, I know, a matter of much more importance. I don't think girls or boys are any the worse for not having hot dinners, provided they have enough and of good quality; but I do think it extremely injurious to them to be eating half a dinner at lunch time and another half when they return from school, for which they have only half an appetite. Either give them a good, hearty lunch that will be a substitute for dinner, and then let them wait till supper-time, or else give a light lunch that will not spoil their appetites for a good dinner when they get home. If they have had a hearty lunch, they only pick out the dainties when they come home, and at supper-time long for the substantial which they have rejected.

To educate the appetites of young people is only next to importance to educating their understandings. Habit is everything in eating, and we parents are largely responsible for such habits as either make them life-long dyspep-

tics or healthy men and women. TRY AGAIN is right to call our attention to this matter, and I hope it will be the means of some people bestowing more thought upon the subject than it usually gets. When my children are within reach, I like to give them soup for lunch. That, with bread or crackers, makes a most excellent and satisfying luncheon, and in no way interferes with a generous dinner later; but as soup is taken as a first course at dinner, it does lessen the appetite for the dinner.

As this does not meet the question of school lunches, it is somewhat out of place, but one thought is apt to suggest another, and therefore I must be excused; I will try to get more information to the point ready for next time.

HELEN BLAZERS.

So much depends upon the hours our children spend in school as to the luncheon that is suitable, that we can only aim at what TRY AGAIN wants, with the hope that it may hit the mark. If they have the whole day, from nine to three, the luncheon ought to be substantial, as it takes almost the place of dinner. I don't know anything better than sandwiches and fruit. For such a lunch I should give them a basket large enough to hold a reasonable dinner. One of those candy boxes that holds a pound filled with TRY AGAIN'S Saratoga chips, four sandwiches, an orange or an apple for each, and, if they like milk, one of those self-closing pint bottles of milk, would be a nice luncheon for two children—sufficient for a dinner, if they have a supper later—so that there need be no getting out things when they come home. For variety, the meat can run the entire range of the family supplies, and the fruit can also be varied. Bread and butter is always in order, and can be kept from drying by wrapping in the paper now used for wrapping butter prints, each piece by itself. I don't believe in sweet cakes generally, or in sweet-meats, but I will send with this a receipt for coffee cake—which is good and what I have always known as raisin bread. It is very nice for luncheon purposes at home or at school.

DOROTHEA DOOLITTLE.

**COFFEE CAKE.**—Take 1 generous pint bread dough and work into it  $\frac{1}{2}$  cup butter,  $\frac{1}{2}$  cup sugar, 1 beaten egg and  $\frac{1}{2}$  cup raisins, stoned and well floured. Put into a buttered pan, let rise till it doubles its bulk, and bake about 45 minutes in a moderate oven. Remove, brush with melted butter, sprinkle with sugar and cinnamon mixed. Serve either hot or cold. D. D.

As you may suspect, I have become a thorough convert in regard to parlors, and this winter have surprised my friends and neighbors by making mine a regular home room. It is a more sunny and in every way a nicer room than any other, but is not quite as convenient to reach as it might be.



We have to go the full length of the hall from the dining room to reach it, but when there, it is so thoroughly enjoyable. The sofa and easy-chairs that were a necessary part of the parlor furnishing, but only used when company was here, are now matters of real comfort. I just made pretty chintz-slip covers for them, and they will not be any the worse for every-day use; I find it so restful to get away from the working and eating part of the house. I read more and occasionally amuse myself with my old music, whereas before, when the parlor was simply a company room, the piano was a dead letter as far as I was concerned.

My friends seem to take kindly to it, and frequently remark on my cheerful surroundings. I know they think my trip has rejuvenated me, and in that way it has done a good deal of something. Brother is so delighted with the change that he is ready to say amen to all my theories on the subject. Formerly we sat in the dining-room, and it was not unpleasant, but we were apt to ask our friends into the parlor, and the mere act of going away from our familiar surroundings to entertain them took something out of the enjoyment. Besides that, the best and prettiest of our possessions were always devoted to the parlor, and now we enjoy our best all the time; that is, all our leisure time. Just try it, if there are any of you who still cling to the old way of keeping a shut-up room for company purposes only, and have no other equally pretty and comfortable for yourselves. Of course there are houses in which such a room is provided for the family besides the parlor. Then there can be no objection to keeping one room always ready for company, but our every-day pleasure and comfort is of much more consequence than the impression we make on outsiders—and that is chiefly what the stereotyped parlor is for.

AMANDA A.

THE little courtesies, the veriest trifles, are ever present with me, for I have long since learned that in these simple things life finds its truest expression. This truth seemed verified after reading the article by AMANDA A. in THE FARMER of February 15th. Indeed, there were many truths and lessons contained in it. I suppose many of your readers think me a radical and come-outer, just a trifle peculiar, not enjoying the good things of this life. Now, though this is a little personality I seldom care to indulge in, I would just like all to feel that exactly the reverse is true. It is just that the "good tidings" have come to me, and, being benefited, the spirit impels me to give you my experience. Not until the truths of the grand, yet simple, philosophy of right ways of living came to me, did I know that life was well worth the living. My spiritual vision is so clear I find happiness in the veriest trifles; my soul is full of

thoughts longing for expression, loving and tender towards all. I desire all advice accepted in the same tender, loving spirit. The lessons to be learned from the experience of AMANDA A. are many and varied, and if we stop to think, might be applicable to ourselves. It is the ever present thought we need, this forgetting self for others. The world is too full of decent selfishness. The after-thoughts often bring happiness, yet it is always well to cultivate the present. In order to do this, we must learn to live from the spiritual part of our natures; we must cease to do evil; learn to do well. If we indulge our appetites, we must be unmindful of others; having satisfied ourselves, we lack the generous forethought that impresses us to minister wholly to those accepting our hospitality.

In the vain struggle as to what we shall eat and drink and wherewithal we shall be clothed, we miss many of the sweet delights of life and forget the courtesies due others. We want to simplify and live after a divine plan, forgetting many of the barbarous ways handed down by ancestors and which no doubt shortened the lives of our loved ones. A new faith and hope come to us if we will but accept them. This matter of eating and drinking is a very simple one if we will but think so, yet how complicated it is to many, and its after-effect is the cause of our neglecting these very trifles, so simple, yet so important.

It takes very little of the right sort of food to sustain life, all things being equal. The menu nature provides is varied and delicious. I have no doubt the time will come when an elixir will be found of great nutritive value, the use of which will give life and health and perfect freedom from taxation, and forever serving perishable things. As to our drink, pure, living water is best, if we cultivate a taste for the ideal food, fresh, ripe fruit. We will be surprised how little desire we will have for drink. As to our dress, that can be beautiful, harmonious and tasteful, if we cultivate the same simplicity. One who discards conventional dress and adopts a style which fulfils their conception of fitness, beauty and exclusiveness, experiences a sense of freedom and of increased personal efficiency, together with other far-reaching effects, which seem almost equal to the changes wrought by "Arabian Nights" magic. The whole nature is quickened into new life. The heart opens wide enough to take all mankind into its capacious chambers; the intellect is alive with new faculties; the spirit finds grander scope. There are many other points that might be considered in connection with this and kindred subjects, but they must be reserved for future discussion. Let me add, finally, that it would have been better for AMANDA A. to have asked for a glass of warm milk, finding in it a refreshing, nutri-

tive fluid food, giving less trouble, leaving no rude after-effects, as do tea or coffee, either of which is very injurious to the system.

"The memory of a kindly word  
For long gone by,  
The fragrance of a faded flower  
Sent lovingly;  
The gleaming of a sudden smile  
Or sudden tear;  
The warmer pressure of the hand;  
The tone of cheer;  
The hush that means 'I cannot speak,  
But I have heard';  
The note that only bears a verse  
From God's own Word—  
Such tiny things we hardly count  
As ministry;  
The giver deeming they have shown  
Scant sympathy.  
But when the heart is overwrought,  
Oh! who can tell  
The power of e'en such tiny things  
To make it well."

A STRANGER.

Sand Hills, Augusta, Ga.

It is comforting to read another's method so much like our own, as the directions given by TRY AGAIN for making Saratoga chips, for now we feel sure it is the right way. We would, however, like her to try an egg-beater for taking them out of the boiling lard, as that will allow better draining than an ordinary spoon. We keep a small porcelain-lined kettle, about nine inches in diameter, for this purpose alone, leaving the fat in it, closely covered after cooling. The same quantity will do to use a number of times, occasionally straining, to free from scraps and sediment. With this kettle always ready, it is but little trouble or expense to have the crisp potatoes for our Sunday morning breakfast, and they are enjoyed by every member of the family. I think, with H. B., it is economy to set our tables as well for our own family as our means will justify, and only add another place when an unexpected guest arrives—economy of materials and peace of mind—for an effort to make a change in our bill-of-fare at short notice frequently involves waste, as well as worry. When we invite guests, of course some extra preparation is made, but a table that is as neat as it should be for our own home circle is sufficiently so for the chance visitor. As to waiting, we usually have a waitress, but when, as frequently happens, there are ten or twelve at the table, a daughter or son will assist her.

BUSY BEE.

I AGREE with DOROTHEA D. when she says "we busy house-wives" have nothing to do with form and ceremony—may I add, in our general home life? A warm, cordial greeting from our hostess, whether our call is opportune or inopportune, brings more pleasure and joy to the heart than a cold, formal air, which tells us plainly another time would have suited her better.

Now about table arrangements, etc., which HELEN B. speaks of in her article. To keep the table tidy and

inviting, enough at all meals, for should a traveler (usually at this season they are frequent) or neighbor call at meal time, have him to come in and enjoy it with the family, without any hurrying back and forth, which might make him feel uncomfortable and show the housekeeper in a bad light. Do not apologize for your menu, but be as easy and cheerful as possible, and in that way much pleasure will be felt by all around the table—a place where merriment, kind words and good feeling should be shown, as families sometime fail to meet one another save at the meals.

May I inquire for "SUSIE DUNBAR," "JANET" and "NORA?" We miss their writings and hope they will soon put in their appearance, giving a good excuse for their absence and bring much information for our benefit.

Have any of the sisters had experience in family creamers? If so, please give it for the benefit of others. I greatly desire and really need one, as I'm making butter of high grade for market. I find skimming and washing so many pans too laborious and tedious, but the high prices rather deter me from investing in one. I was called on in my farming to lay a worm fence, the old one having been spoiled by poison oak running over each stake. I stood by, gave orders, sighted, etc., with some misgivings, for fear my work might not be approved of by the sterner sex, for the fence occupies a conspicuous place on the farm. When I went back after the work was done, I did not find it as straight as a die—oh, no; it was a worm fence; however, I hope my effort will not be criticised, for we farmers have to do things quite foreign to our nature sometimes. If you find the onions planted out last fall growing slowly, sprinkle ashes around them. I have made two applications to mine, and now they are looking very nice. The sap in grape-vines is rising rapidly; if the knife is not used at once, and that sparingly, more harm than good will follow. I succeed in raising cuttings very well; along the palings in the yard is a good place to root them, and the next season set them where you wish them to grow. Save the bones in a keg and throw on ashes; in a few weeks there will be no bones seen and a fine mixture will be at hand for the grape-vines. Try it, sisters.

BESSIE.

I do not belong to the Club, but if I can help the toiling mother or lighten her burdens by a little advice, I feel it my duty to do so. The matter of boys' clothes, pants and stockings in particular, is a source of considerable worry to me, as well as all other mothers whose means are limited. I have two young hopefuls who make out to poke their knees and elbows through pants, stockings and jackets as fast as any two of the same age in the state, I'll warrant. Now, as regards waists. I have discarded them



altogether, excepting, of course, the under-bodies to which their drawers are buttoned. I got completely tired out mending waists and making button-holes, as I found it took two or three sets of button-holes to wear out one pair of pants, not speaking of the amount of mending that had to be done on waists owing to the buttons being torn off. So I went to work and made regular shirts, and let them use suspenders, as much to the boys' satisfaction (for you know all boys want suspenders) as to my own relief.

These little shirts can be made with cuffs and round collars, the same as waists, and when they have jackets, which all do wear at this season, no one can tell the difference. Around the house ordinarily, I think suspenders are just as presentable and, in fact, more so than waists with a button or so off or button-holes torn out, as is generally the case. And in the parlor, at church or Sunday-school, I do not consider a boy's costume complete without a jacket any more than a man's without a coat. For this reason I believe in making jackets out of linen or other suitable material for summer use.

So far as stockings are concerned, I see no way yet out of the difficulty. Where darning will answer, I darn; or, if patching will cover the large holes with less trouble, I patch. But rest assured, as soon as my boys reach the age of twelve, on go long pants.

While I have a little time to devote to these matters, I will give a few ideas about LUNCHES for school children, which may be of some use to the members of the Club. My plan is to make little changes in the lunches, without making any extra work. For example, make doughnuts one Saturday, allowing two or three of these for each scholar. The next Saturday, make cookies; the next, ginger cakes, and so on. I have found jelly cake a very handy thing to have on hand for this purpose, allowing one slice to each child, a common-sized cake will last several days, and this kind of cake does not dry out as soon as most kinds do. Of course, when children have cakes for lunch, they must not expect it to be put on the table at other meals, except on special occasions, and I generally substitute nice warm-boiled rice, eaten with milk or sugar, or else a pudding of some sort for dinner. A good way to use preserves is to make a nice pie crust, take a piece the size of a walnut, roll out to about the size of a saucer, spread a spoonful or two of preserves on one-half, lap the other half over, pinch the edges, and bake a nice brown; one of these turn-overs is enough for each child. The housekeeper may make up enough of pie crust to last some time during cold weather without its becoming stale, and thus save the trouble of making every day, and while the last meal for the day is in progress, these little turn-overs may be baked for the next

day's lunch. If you have young girls attending school, this is a good way for them to "get their hand in," by preparing these little dainties while mamma is getting supper. My children prefer biscuit and jelly when they don't have meat, but like light bread best for sandwiches. A fried egg between slices of bread is good, or hard boiled eggs eaten with a little salt goes first-rate. When I have chicken for dinner, my children save their piece for school and eat the gravy instead. I have a hasty meal in the middle of the day and have our regular dinner at six o'clock, which gives the children a chance to get one good, warm, vegetable meal once a day, which is very necessary, I contend, for health. SUSIE SOLLARS.

#### Hours of Ease.

##### The Much Misunderstood Women Workers.

By far the larger portion of American women refuse to see where there are any rights or privileges denied to them, nor do they think they would be willing to accept what a very respectable minority has for many years been fighting for and claiming as the rights of the sex. There is also a class between these two who neither claim or deny the points in question, but are nevertheless deeply interested in the issue; and from this class, I dare say, are drawn the recruits by which the army of warriors is so manifestly increased from year to year. They can no longer be called an army of martyrs, for I doubt if ever there was a company that marched forward with banners flying so jubilantly, and who did their fighting under such delightful circumstances, as do these pioneer workers in the cause of independent womanhood in these latter days.

Those good and well meaning women who refuse to see anything womanly in the stand their more courageous and far-seeing sisters have taken are, as a rule, not very well informed on the subject at issue, and they are, moreover, blinded by their preconceived notions of woman's place and sphere to such a degree that they cannot imagine that those noble-minded women who have devoted their lives to the endeavor to obtain equal consideration for women in the enactment of domestic laws, to which the right of suffrage is only a stepping stone, are at all like other women, and they also refuse to be enlightened in regard to them. Such has been my own experience, and therefore I say it confidently, and also that our ignorance has been and still is past understanding.

When at last I was prevailed upon to attend one of their convention sessions I was astonished, first, at the appearance of the crowd upon the stage, to find them richly and fashionably attired and as genial and gracious in their bearing as any crowd of well-bred women in a drawing room. I have come to

admire the degree to which zeal in their work has overcome their self-consciousness until an audience is to them only an opportunity to present their cause, and nothing to be afraid of. It is a pity that people persist in calling it boldness, when it is only a kind of courage they would be most ready to applaud if they knew all that these brave women are contending for.

Unfortunately the odium which attaches to women standing shoulder to shoulder with their husbands, fathers and sons at the polls has stamped itself upon all they do. If the rest could be accomplished without this initial step, I dare say "Aunt Susan" and the multitude of nieces whom she has inspired, would willingly leave the voting to be done by those who arrogated to themselves that exclusive privilege, but it became necessary for women to begin at the polls in order to obtain the right kind of law makers to make righteous laws, and therefore they insist upon this starting point. In the meanwhile the heaven has worked itself into many places, and in many things the situation has undergone material changes. Women in some sections of the country have been granted some right in the control of their own property, and in some places they are allowed to be the natural guardians of their own children, instead of being subject to the control of any man whom the husband may appoint to succeed himself in that capacity. Everywhere in this blessed land a woman may now find employment in ways that are perfectly suited to her capacity and delicacy of feeling by which she can earn a support for herself or family, that were formerly forbidden to her; but it has not yet penetrated the understanding or sense of justice of those who are still in control that she is entitled to the same compensation for the same work as the men.

Until women's status is recognized as equal in dignity and importance to that of men, there is bound to be an irrepressible conflict. It does not necessarily imply that the two sexes shall not continue each on their own line of action, but rather that each may be allowed to pursue their natural bent untrammelled by unjust laws or ignorant prejudices. Women have as just cause as their colonial ancestors to rebel against taxation without representation, and mothers are the rightful guardians of their own children. The wife ought certainly to be an equal partner in all the affairs of her husband, with the privileges such partnership confers upon men associated together, and there ought to be some way in which her power may be exerted to put temptation out of the way of her boys, to say nothing of the boys' fathers.

If the men, who claim to be sufficient unto themselves for all needful public protection, will so purge the statute books and make and enforce

laws that will insure women in these and some other rights, women will most willingly forego their right of franchise and betake themselves to that sheltered usefulness which men seem so eager they should occupy. In the meanwhile, it is extremely unbecoming in those women who do nothing but bewail the ills these women are seeking to remove, to cast reproach upon the earnest workers. Their methods and demands may not always commend them to our limited judgment, nevertheless we owe too much of our present emancipation to their fearless labors to indulge in casting slurs upon their work. CERES.

#### The Grange.

PATRONS OF HUSBANDRY—OFFICE OF THE MASTER OF MARYLAND STATE GRANGE. WEST RIVER, A. A. Co., March 10th, 1891.

To the Members of the Order of Patrons of Husbandry in Maryland. DEAR SISTERS AND BROTHERS:

I have just received the following appeal from the Master of the National Grange, and trust that Maryland will be in this, as she has always been in the past, in the foremost rank in furnishing aid to our destitute brethren.

In accordance with our State By-Laws, all contributions must go through the office of the Master of the State Grange.

I trust that you will act promptly in this matter.

Truly and fraternally yours, H. M. MURRAY, Master of Maryland State Grange.

OFFICE OF MASTER OF NATIONAL GRANGE, PATRONS OF HUSBANDRY. DELTA, O., March 5th, 1891.

To the Members of the Order of Patrons of Husbandry in the United States of America. SISTERS AND BROTHERS:

A Macedonian cry for help comes from our brethren in the drouth-stricken region of Nebraska, and I am fully convinced that they are in great distress. Our brethren in other sections of the state have responded nobly, but cannot afford sufficient help. I therefore appeal to the membership at large to respond to the call. As seed time is near at hand, (and what is needed most is seed and feed,) prompt action is important. I therefore suggest in cases where regular meetings are not soon to be held, that special meetings be called, or that the Masters appoint committees at once to canvass for contributions.

I hope the committees on women's work will lend a helping hand in this effort to drive hunger and suffering from the homes of our sisters and brothers in Nebraska.

Fraternally, J. H. BRIGHAM, Master of the National Grange, P. of H.

#### Crop Statistics for March.

The Department of Agriculture gives in its returns for March, an estimate of the corn and wheat in the hands of farmers, the proportion and present value of merchantable corn, the weight of wheat per measured bushel, and other points in the commercial distribution of grain.

It makes the farmers' reserve of corn 36.4 per cent. of the crop, in comparison with 45.9 per cent. last year; in bushels, 542,000,000, against 970,

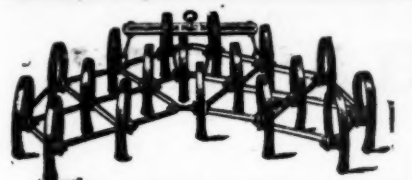






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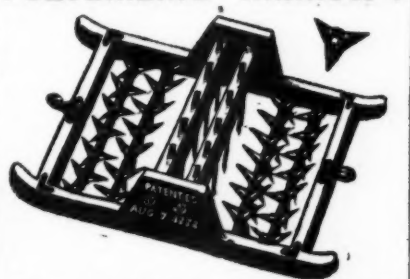
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## CABASH 11813, RECORD 2:27 1/2.

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Cabash is a beautiful Golden Chestnut, stands 15 3/4 hands, weighs 1185, is perfectly sound, excellent feet and limbs, kind disposition, intelligent and a pleasant game driver. He has never met his equal for beauty and style. He is a pure-gaited trotter and imparts style and speed to all his colts.

—I MAKE THE FOLLOWING OFFER:—  
1—I will give \$300 apiece for colts whose dam is standard bred if she has a record of 2:30 or better.  
2 I will give \$300 apiece for colts out of a dam, standard bred, that has produced a colt with a record of 2:30 or better.  
3—I will give \$500 apiece for colts out of a dam with a record of 2:30 or better if she has produced a colt with a record of 2:30 or better.

CONDITIONS—The colts to be sired by Cabash. The dams to be constitutionally sound; records must be made in regular races. The colts to be five months old, sound and in thrifty condition.

TERMS—\$25 cash, with return privilege if mare does not prove with foal.

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